We Claim:

1. Use of gaboxadol for preparing a medicament for treating sleep apnea in a human patient.

2. Use of gaboxadol for preparing a medicament for treating impaired respiratory function in a human patient suffering from sleep apnea, such as central sleep apnea or obstructive sleep apnea.

3. Use of claim 1 or 2 wherein sleep apnea is central sleep apnea.

4. Use of claim 1 or 2 wherein sleep apnea is obstructive sleep apnea.

5. Use of claim 1 or 2 wherein sleep apnea is a mix of central sleep apnea and obstructive sleep apnea.

6. Use of any one of claims 1-5 wherein gaboxadol increases slow wave sleep in the patient and thereby improves the respiratory function.

7. Use of any one of claims 1-6 wherein the human patient suffer from sleep apnea and depression at the same time.

8. Use of any one of claims 1-7 wherein gaboxadol is in the form of an acid addition salt, such as the hydrochloride or hydrobromide salt, or a zwitter ion hydrate, such as the zwitter ion monohydrate, or the zwitter ion anhydrate.

9. Use of any one of claims 1-8 wherein the medicament is an oral dose form.

10. Use of claim 9 wherein the medicament is a solid oral dose form, such as tablets or capsules, or a liquid oral dose form.

11. Use of any one of claims 9-10 wherein the medicament comprises from 2.5 mg to 20 mg of gaboxadol, such as 2.5 mg to 4 mg, 4 mg to 6 mg, 6 mg to 8 mg, 8 mg to 10 mg,

10 mg to 12 mg, 12 mg to 14 mg, 14 mg to 16 mg, 16 mg to 18 mg, or 18 mg to 20 mg, typically from 5 mg to 15 mg.

12. Use of any one of claims 1-11 wherein the human patient is selected from elderly or adults.

13. Use of any one of claims 1-12 wherein said treatment is short term treatment.

14. Use of any one of claims 1-12 wherein said treatment is intermediate term treatment.

15. Use of any one of claims 1-12 wherein said treatment is long term treatment.

16. Use of any one of claims 1-15 wherein said gaboxadol is crystalline.

17. Use of any one of claims 1-16 wherein the medicament comprises an amount of from 2.5 mg to 20 mg, such as 5 mg to 15 mg of gaboxadol, said amount being effective during a substantial portion of a single sleep period.

18. Use of claim 17 wherein said substantial portion is 50% or more, such as 80% or more.

19. Use of any one of claims 17-18 wherein said single sleep period is from one to eight hours.

20. Use of any one of claims 17-19 wherein the amount of gaboxadol is released from a composition for controlled release, such as an extended release.

21. Use of claim 20 wherein from 50% to 100% of the amount of gaboxadol is released within a period of three hours from administration.

22. Use of claim 20 wherein from 80% to 100% of the amount of gaboxadol is released within a period of five hours from administration.

23. A method for treating impaired respiratory function in a human patient suffering from sleep apnea, such as central sleep apnea or obstructive sleep apnea, comprising administering to said patient an effective amount of gaboxadol per day.

24. A method for treating sleep apnea, such as central sleep apnea or obstructive sleep apnea, in a human patient, comprising administering to said patient an effective amount of gaboxadol per day.